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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,096	11/26/2001	Shoupu Chen	83489DMW	8284

7590 08/25/2005

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EXAMINER

KIM, CHONG R

ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/994,096

Applicant(s)

CHEN ET AL.

Examiner

Charles Kim

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-27 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27 and 48-53 is/are allowed.
- 6) ☒ Claim(s) 19-21 and 45-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment and Arguments***

1. Applicant's amendment filed on December 15, 2004 has been entered and made of record.
2. In view of applicant's amendment, the statutory double patenting rejection is withdrawn.
3. In view of applicant's amendment, the claim objections are withdrawn.
4. The indicated allowability of claims 19-21, 45-47 is withdrawn in view of the newly discovered reference(s) to Chen et al., U.S. Patent No. 6,792,134 ("Chen") and Lin et al., U.S. Patent No. 6,600,830 ("Lin"). Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

The following quotation of 37 CFR § 1.75(a) is the basis of objection:

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

5. Claim 20 is objected to under 37 CFR § 1.75 (a) and (d)(1) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Referring to claim 20, the phrase "the automatically identified eye positions" in lines 3-4 lacks antecedent basis. It appears that the applicant intended the phrase to read "the identified eye positions". Appropriate correction is required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 19 and 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 20 respectively, of Chen et al., U.S. Patent No. 6,792,134 ("Chen") in view of Lin et al., U.S. Patent No. 6,600,830 ("Lin").

Claim 19 of the instant application recites, "A digital image processing method for detecting facial features in a digital image, comprising the steps of: detecting iris pixels; clustering the iris pixels; selecting at least one of the following methods to identify eye positions in an image: applying geometric reasoning to detect eye positions using the iris pixel clusters; applying a summation of squared difference method to detect eye positions based upon the iris pixel clusters; and, applying a summation of squared difference method to detect eye positions from the pixels in the image; wherein the method applied is selected on the basis of the number of iris pixel clusters" in lines 1-15, which corresponds to "A digital image processing method for detecting human eyes in a digital image, comprising the steps of: detecting iris pixels; clustering the iris pixels; selecting at least one of the following methods to identify eye positions in an

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image: applying geometric reasoning to detect eye positions using the iris pixel clusters; applying a summation of squared difference method to detect eye positions based upon the iris pixel clusters; and, applying a summation of squared difference method to detect eye positions from the pixels in the image; wherein the applying step is selected on the basis of the number of iris pixel clusters” in claim 1, lines 1-15 of Chen.

Claim 1 of Chen does not recite the step of “locating facial feature using the identified eye positions; and wherein estimated locations to each for the facial features are based on the identified eye positions”. However, this feature was exceedingly well known in the art. For example, Lin discloses these features in figure 1.

Claim 1 of Chen and the Lin reference are combinable because they are both concerned with extracting facial features based on image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify claim 1 of Chen so that it includes the step of locating facial feature using the identified eye positions, and wherein estimated locations to each for the facial features are based on the identified eye positions, as taught by Lin. The suggestion/motivation for doing so would have been to accelerate the process of search for the facial features (Lin, abstract). Therefore, it would have been obvious to modify claim 1 of Chen in view of Lin’s teaching.

A similar rejection is applicable to claim 45 of the instant application in view of claim 20 of Chen and the Lin reference.

***Allowable Subject Matter***

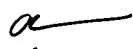
7. Claims 22-27, 48-53 are allowed.

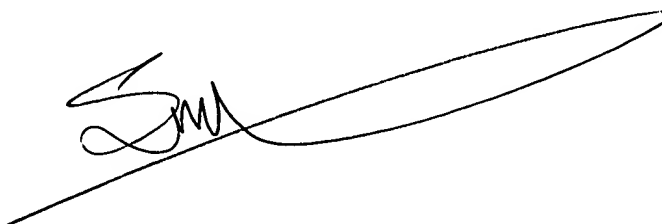
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ck  
August 9, 2005



**SAMIR AHMED  
PRIMARY EXAMINER**